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OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/890,811B

DATE: 07/05/2002

TIME: 15:37:23

Input Set : N:\Crff3\06122002\I890811A.raw

Output Set: N:\CRF3\07052002\I890811B.raw

C-->

1 <110> APPLICANT: Zhu, Qun
2 Pamodu, Omolayo O.
3 <120> TITLE OF INVENTION: SPF1-Related Transcription Factors
4 <130> FILE REFERENCE: BBL436 PCT
5 <140> CURRENT APPLICATION NUMBER: US/09/890,811B
6 <141> CURRENT FILING DATE: 2002-05-07
7 <150> PRIOR APPLICATION NUMBER: 60/174325
8 <151> PRIOR FILING DATE: 2000-01-04
9 <160> NUMBER OF SEQ ID NOS: 14
10 <170> SOFTWARE: Microsoft Office 97
12 <210> SEQ ID NO: 1
13 <211> LENGTH: 512
14 <212> TYPE: DNA
15 <213> ORGANISM: Zea mays
16 <220> FEATURE:
17 <221> NAME/KEY: unsure
18 <222> LOCATION: (368)
19 <223> OTHER INFORMATION: n=a,c,g or t
20 <220> FEATURE:
21 <221> NAME/KEY: unsure
22 <222> LOCATION: (387)
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26 <222> LOCATION: (405)
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30 <222> LOCATION: (408)
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33 <221> NAME/KEY: unsure
34 <222> LOCATION: (445)
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36 <220> FEATURE:
37 <221> NAME/KEY: unsure
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39 <223> OTHER INFORMATION: n=a,c,g or t
40 <220> FEATURE:
41 <221> NAME/KEY: unsure
42 <222> LOCATION: (453)
43 <223> OTHER INFORMATION: n=a,c,g or t
44 <220> FEATURE:

ENTERED

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45 <221> NAME/KEY: unsure
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47 <223> OTHER INFORMATION: n=a,c,g or t
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49 <221> NAME/KEY: unsure
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53 <221> NAME/KEY: unsure
54 <222> LOCATION: (500)
55 <223> OTHER INFORMATION: n=a,c,g or t
56 <400> SEQUENCE: 1
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58 ttacaagtgc actcatccta attgtgaagt taaaaagcta ttagagcggt cgcttgatgg 120
59 tcagattact gaagttgttt ataaagggca tcataatcat cccaagcccc aaccaaatag 180
60 aagggttagct gctgtgtcag ttccttcaag ccaggctgaa gaaagatacg atggtgtggc 240
61 acctattgaa gacaaacctt caaatattta ttccaacctc tgtaaccaag cacattcagc 300
62 tggcatgtgt gataatgttc cgggtccagc aagtgatgat gatgttgatg ctggaggtgg 360
W--> 63 aagaccnmac cctgggggga tgactcnaat gatgatgatg acttngnct caaaaacgca 420
W--> 64 aggaaaaatgg aatctgccgg gtatncnatg ccnngccttg antggggtaa accaaatccc 480
W--> 65 ggagcccnm nttcctttt aaaaactgtt tt 512
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68 <211> LENGTH: 170
69 <212> TYPE: PRT
70 <213> ORGANISM: Zea mays
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72 <221> NAME/KEY: unsure
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74 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
75 <220> FEATURE:
76 <221> NAME/KEY: unsure
77 <222> LOCATION: (129)
78 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
79 <220> FEATURE:
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81 <222> LOCATION: (135)..(136)
82 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
83 <220> FEATURE:
84 <221> NAME/KEY: unsure
85 <222> LOCATION: (148)..(149)
86 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
87 <220> FEATURE:
88 <221> NAME/KEY: unsure
89 <222> LOCATION: (151)
90 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
91 <220> FEATURE:
92 <221> NAME/KEY: unsure
93 <222> LOCATION: (154)
94 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID

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 Output Set: N:\CRF3\07052002\I890811B.raw

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97 <222> LOCATION: (163)..(164)
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102 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
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105       1           5           10           15
106   Pro Arg Ser Tyr Tyr Lys Cys Thr His Pro Asn Cys Glu Val Lys Lys
107       20           25           30
108   Leu Leu Glu Arg Ser Leu Asp Gly Gln Ile Thr Glu Val Val Tyr Lys
109       35           40           45
110   Gly His His Asn His Pro Lys Pro Gln Pro Asn Arg Arg Leu Ala Ala
111       50           55           60
112   Gly Ala Val Pro Ser Ser Gln Ala Glu Glu Arg Tyr Asp Gly Val Ala
113       65           70           75           80
114   Pro Ile Glu Asp Lys Pro Ser Asn Ile Tyr Ser Asn Leu Cys Asn Gln
115       85           90           95
116   Ala His Ser Ala Gly Met Val Asp Asn Val Pro Gly Pro Ala Ser Asp
117       100          105          110
W--> 118   Asp Asp Val Asp Ala Gly Gly Gly Arg Pro Xaa Pro Gly Gly Met Thr
119       115          120          125
W--> 120   Xaa Met Met Met Met Thr Xaa Xaa Ser Lys Thr Gln Gly Lys Trp Asn
121       130          135          140
W--> 122   Leu Pro Gly Xaa Xaa Cys Xaa Ala Leu Xaa Gly Val Asn Gln Ile Pro
123       145          150          155          160
W--> 124   Glu Pro Xaa Xaa Pro Phe Xaa Lys Leu Phe
125       165          170
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128 <211> LENGTH: 717
129 <212> TYPE: DNA
130 <213> ORGANISM: Zea mays
131 <220> FEATURE:
132 <221> NAME/KEY: unsure
133 <222> LOCATION: (11)
134 <223> OTHER INFORMATION: n=a,c,g or t
135 <220> FEATURE:
136 <221> NAME/KEY: unsure
137 <222> LOCATION: (15)
138 <223> OTHER INFORMATION: n=a,c,g or t
139 <220> FEATURE:
140 <221> NAME/KEY: unsure
141 <222> LOCATION: (610)
142 <223> OTHER INFORMATION: n=a,c,g or t
143 <220> FEATURE:
144 <221> NAME/KEY: unsure

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RAW SEQUENCE LISTING

DATE: 07/05/2002

PATENT APPLICATION: US/09/890,811B

TIME: 15:37:23

Input Set : N:\Crif3\06122002\I890811A.raw

Output Set: N:\CRF3\07052002\I890811B.raw

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145 <222> LOCATION: (640)
146 <223> OTHER INFORMATION: n=a,c,g or t
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149 <222> LOCATION: (653)
150 <223> OTHER INFORMATION: n=a,c,g or t
151 <220> FEATURE:
152 <221> NAME/KEY: unsure
153 <222> LOCATION: (680)
154 <223> OTHER INFORMATION: n=a,c,g or t
155 <220> FEATURE:
156 <221> NAME/KEY: unsure
157 <222> LOCATION: (692)
158 <223> OTHER INFORMATION: n=a,c,g or t
159 <220> FEATURE:
160 <221> NAME/KEY: unsure
161 <222> LOCATION: (703)
162 <223> OTHER INFORMATION: n=a,c,g or t
163 <400> SEQUENCE: 3
W- 164 gacgcacccc tctctttctc tcccctctc gtcgtgtcca gtcgtccccc tctcccccac 60
165 tctaccacgc tgcctgtctc tgcgtgtctc gccatggcgt cctccacggg gagctgtggag 120
166 cacggggggg tcaagttcac gccgcgcgcc ttcatcacct ccttcaccca gctgctctcc 180
167 ggcgacgggg acatgctagg agccggcgcc gatcaggagc ggtcgtcgcc gagggggctg 240
168 ttccaccgcg gcgccagggg cgtgcccaag ttcaagtccg cgcagcctcc cagcctgccc 300
169 atctgcgcgc cgcccatgtc gccttctctc tacttgccca tcccgcccgcc gtcacgcccc 360
170 gccgagctgc tgaactcgcc cgtcctgtct cactcgtcct ccaacatcct ggcgtctccc 420
171 accactggcg ccatcccgcg gcagagggtc gactggaaga aggcgcgcga cctgatcgcc 480
172 tctcagttct agcaagacgg cgacagccgg gctgcgcggc ccggtcttca cgaacttctc 540
173 ttcacacggg cacttcaac gccgtgcgcg cgcacacgac gacgacgtcc ttacctcat 600
W- 174 gaagaagaan gtggagaggg ccctggcgga cgggcgcath aacgcaaaa cngtataaaa 660
W- 175 ggcgcgccac aaacaacccn aagccgggtg tncacgcgcc ggnaacttaa ttccgga 717
177 <210> SEQ ID NO: 4
178 <211> LENGTH: 150
179 <212> TYPE: PRF
180 <213> ORGANISM: Zea mays
181 <400> SEQUENCE: 4
182 Met Ala Ser Ser Thr Gly Ser Leu Glu His Gly Gly Phe Thr Phe Thr
183 1 5 10 15
184 Pro Pro Pro Phe Ile Thr Ser Phe Thr Glu Leu Leu Ser Gly Ala Gly
185 20 25 30
186 Asp Met Leu Gly Ala Gly Ala Asp Gln Glu Arg Ser Ser Pro Arg Gly
187 35 40 45
188 Leu Phe His Arg Gly Ala Arg Gly Val Pro Lys Phe Lys Ser Ala Gln
189 50 55 60
190 Pro Pro Ser Leu Pro Ile Ser Pro Pro Pro Met Ser Pro Ser Ser Tyr
191 65 70 75 80
192 Phe Ala Ile Pro Pro Gly Leu Ser Pro Ala Glu Leu Leu Asp Ser Pro
193 85 90 95
194 Val Leu Leu His Ser Ser Ser Asn Ile Leu Ala Ser Pro Thr Thr Gly

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Input Set : N:\Crf3\06122002\I890811A.raw

Output Set : N:\CRF3\07052002\I890811B.raw

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195             100             105             110
196 Ala Ile Pro Ala Gln Arg Phe Asp Trp Lys Lys Ala Ala Asp Leu Ile
197             115             120             125
198 Ala Ser Gln Ser Gln Gln Asp Gly Asp Ser Arg Ala Ala Ala Gly
199             130             135             140
200 Phe Asp Asp Phe Ser Phe
201             145             150
203 <210> SEQ ID NO: 5
204 <211> LENGTH: 1961
205 <212> TYPE: DNA
206 <213> ORGANISM: Oryza sativa
207 <400> SEQUENCE: 5
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209 tcgtctagctc gctctgtctg ttgctgagct gtggttacgct cgccatggcg ttctctgacgg 120
210 gggggttgcca ccacgggttc acgttcacgc gcgcgcggtt catcacgtcg ttccacggac 180
211 tgcgtctcggg gggcggtggg gacctgtctg gcgcgcgctg taaggagcgc tcgcgcgagg 240
212 ggtttctccag aggcggagcg agggtggcg gcggggtgcg caagtccaag tccgcgcagc 300
213 gcgcgcagcct gccgctctcg ccgcgcgcgg tgtcgcgcgt gtctactctc gccatccgcg 360
214 cggggctcag cccacccagag ctgctcgact ccccgcctct cctcagctcc tcccatatct 420
215 tggcggtccc gacacccggt gcaatcccg gctcagaggtt cgactggaag gccagcgccg 480
216 atctcatcgc ttctcagcaa gatgacagcc gcggcgactt ctctctccac accaactccg 540
217 acgcatctggc cgcgcaacgc gctctttctc ctctcttcaa ggagcaagag cagcaagtgg 600
218 tcgagtcgag caaagaacgc gccgcgcgcg cgtcagacaa caagagcgcg gccgcgcgga 660
219 acaacaagct ggaggacggg tacaactgga ggaagtacg gcagaagcag gtgaagggga 720
220 cgagaaaccc gaggagctac tacaagtga cctacaacgg ctgctccatg aagaagaagg 780
221 tggagcgctc gctcgcgcac gccgcgcata cccagatcgt ctacaaggcg gcacacaacc 840
222 accccaagcc gctctccacc gccgcaacgc ctcttccgcg tccaaccgcg ccgctcgcg 900
223 cgacgacctc gcggcgcccg gccgcggcgc ggaccagtac tccgcgcgca cgcccagaaa 960
224 ctctctcgct acgttccggc acgacgagcg cgacaaacga tcgcaccgc gcgaggggca 1020
225 cgagcccga gccaagcgct gaaaaggagg atgctgacaa cgagggcgag tccgcgcgca 1080
226 tggggcggcg cgccggcgcg aaccgcggtg gcgagccgag gcttggtgtg cagacgtgca 1140
227 gcgacatcga catctctgac aacggcttcc ggtgaggaaa gtacggccag aaggtctgca 1200
228 agggcaaccc caaccaagg agctactaca agtgcacgac ggtgggctcg ccggtcgcca 1260
229 agcagctgga gcggcgctcg cacgacacgc gcgcgcgtgt caccacctac gagggcaagc 1320
230 acaaccacga cgtcccggta cgcccgcgcg gcgcgcgcgc gacgcgcgcc gccgcgcgcg 1380
231 tcgcctacgg ctggggggcga tccggggcga cggagctcgc gcgcgcgcag caggggccct 1440
232 acacectcga gatgctcccc aaccgcgcg gcctctacgg cggctacggc gccgcgcgcg 1500
233 gcggcgccgc gttccgcgcg accaaggacg agcgggcgga cgacctgttc gtcgagtcgc 1560
234 tctctgtcta gtgagcgga gccagcgga gctgagctgc gcccaacatc cccctgtctg 1620
235 ccacgtggcg tattttgcgc tgcgcgtata cgtacggcgc ctatcgctac gtatacagc 1680
236 tcgcacgccc tgcccaaac gcgaatacac acatacatac tctcgtacac acgtagttag 1740
237 atacatacac agtatagta gtggtagtgt tagctagtga tccaatttgt 1800
238 tgattcgttg caggccaact ccacgtgggc cacaccggaa acagtacacg cgtatacacc 1860
239 acaactggga tacgcgtacg tacacgatg tttgtgcctt tgtaactgct 1920
240 gagagacagg tcaataaga ctgatgaatt ttctatttct t 1961
242 <210> SEQ ID NO: 6
243 <211> LENGTH: 488
244 <212> TYPE: PRT
245 <213> ORGANISM: Oryza sativa

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/05/2002
PATENT APPLICATION: US/09/890,811B TIME: 15:37:24

Input Set : N:\Crif3\06122002\I890811A.raw
Output Set: N:\CRF3\07052002\I890811B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 368,387,405,408,445,447,453,462,489,490,491,500

Seq#:2; Xaa Pos. 123,129,135,136,148,149,151,154,163,164,167

Seq#:3; N Pos. 11,15,610,640,653,680,692,703

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:14; Line(s) 743

VERIFICATION SUMMARY

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TIME: 15:37:24

Input Set : N:\Crf3\06122002\I890811A.raw

Output Set: N:\CRF3\07052002\I890811B.raw

L:5 M:270 C: Current Application Number differs, Wrong Format
L:63 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:360
L:64 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:420
L:65 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:480
L:118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:112
L:120 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:128
L:122 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:144
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:160
L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:600
L:175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:660